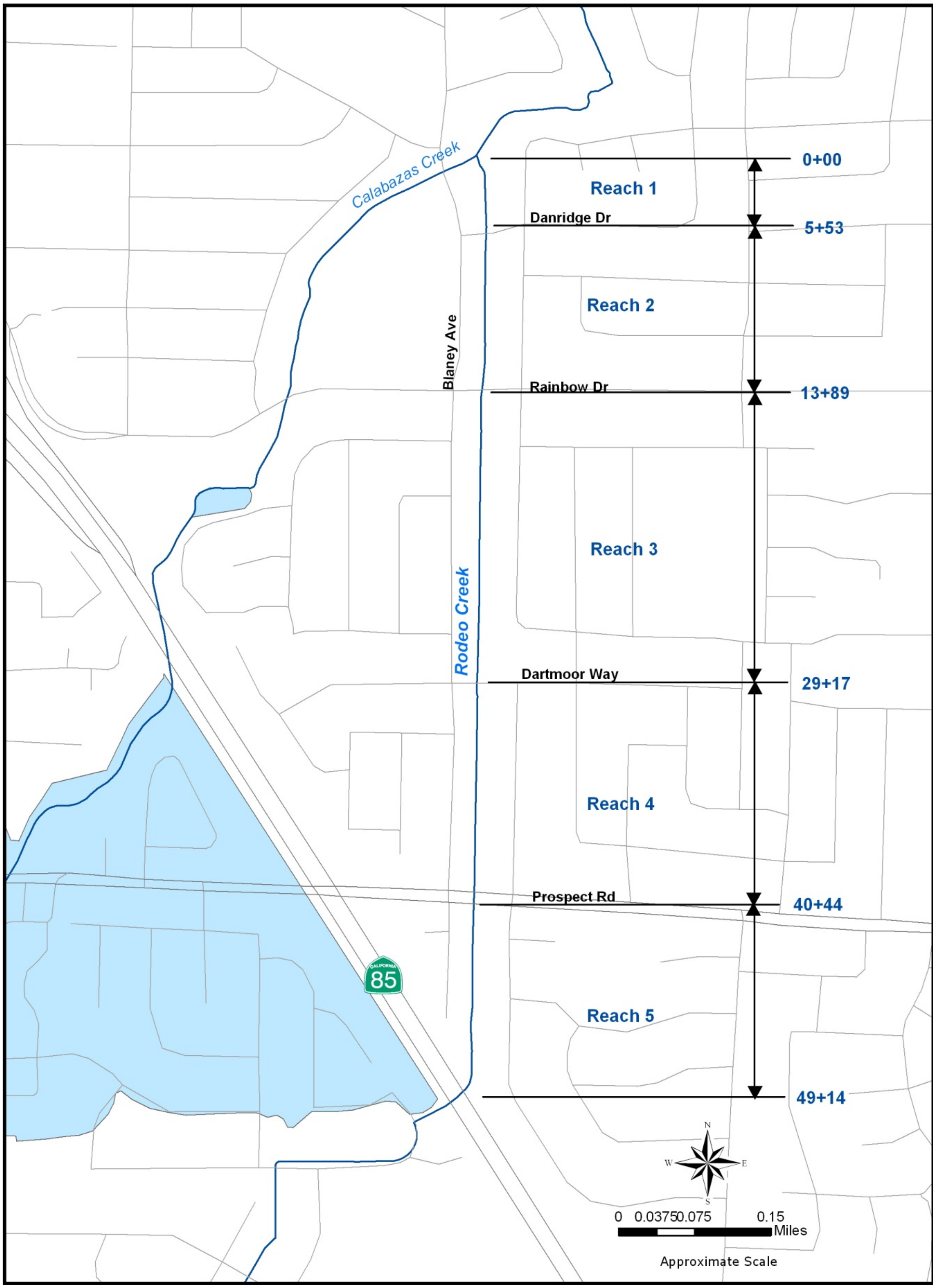
APPENDIX C

CALABAZAS CREEK
Tributary Supplement

Rodeo Creek Reach Map



Rodeo Creek Reaches

Calabazas Creek confluence to D/S of Hwy 85

CALABAZAS CREEK
Tributary Supplement - Rodeo Creek Reach #1

Reach 1: From Calabazas Creek Confluence to upstream of Danridge Drive Bridge (STA 0+00 to STA 5+53)

Reach Description:
In this reach, the channel is a straight in alignment and has a trapezoidal cross section with low earthen banks. Rock riprap has been added in some areas as bank protection and a mid-channel concrete weir is located upstream of a large concrete sloped drop structure near the confluence with Calabazas Creek. Vegetation is mostly limited to grass with the exception of the area around the plunge pool below the drop structure which is highly vegetated with mid-channel grass and large oaks. Bed material consists of mostly firm soil with large rocks. This entire reach is located in the City of San Jose.

Reach Average Invert Slope: Invert approximate average slope for this reach is 0.001 (from STA 2+28 to STA 4+89.31)

1% Flow: 320 cfs

10% Flow: 210 cfs

Current Reach Capacity: This reach has the capacity to convey 1% flow (320 cfs) from Calabazas Creek confluence to upstream of Danridge Drive Bridge.

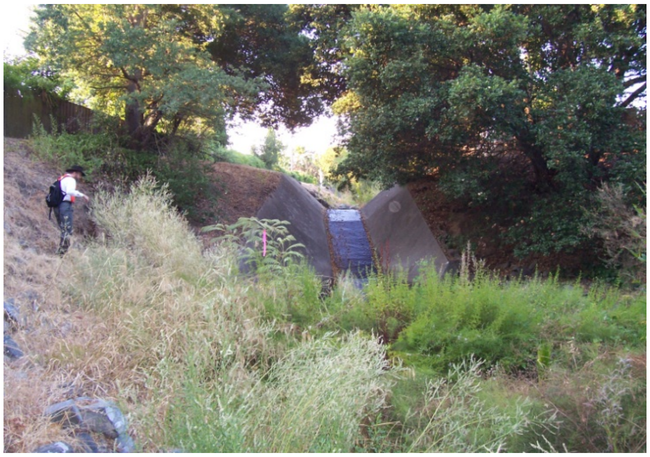
Reach Flooding area Profiles: No flooding issues exist within this reach.

Reach Roughness Coefficient: See roughness coefficient “n” value report for this reach.

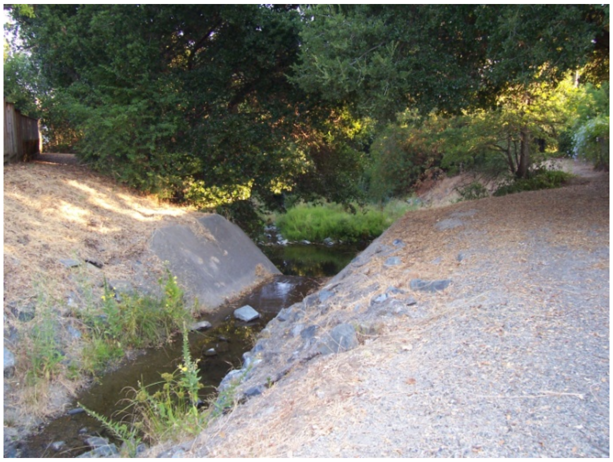
Reach Typical Photos: See the following pages for typical photos and their channel descriptions. Pagination of photos is 1-1and 1-2. For location and stationing see Figure 1 for all reaches.

Reach Erosion Problem: No significant erosion was noted in this reach.

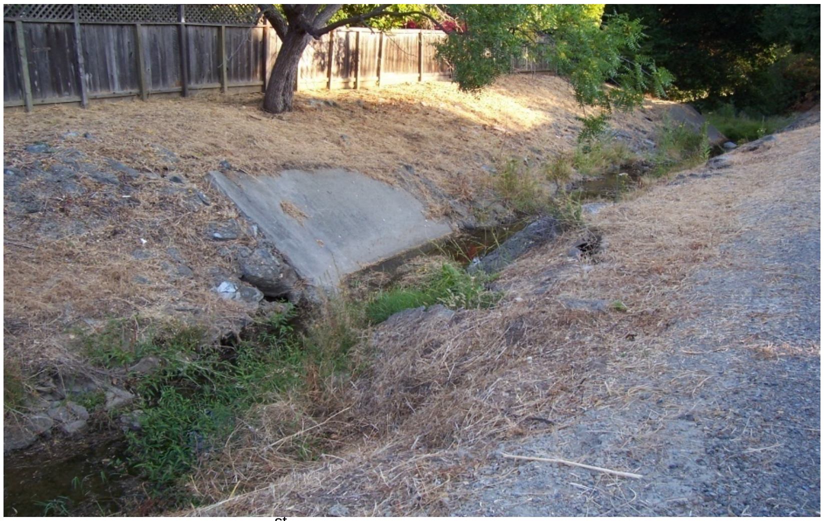
Rodeo Creek



(1) Looking u/s @ drop structure u/s of Calabazas Creek Confluence (STA 1+55)



(5) Looking d/s from above drop structure (STA 2+44)

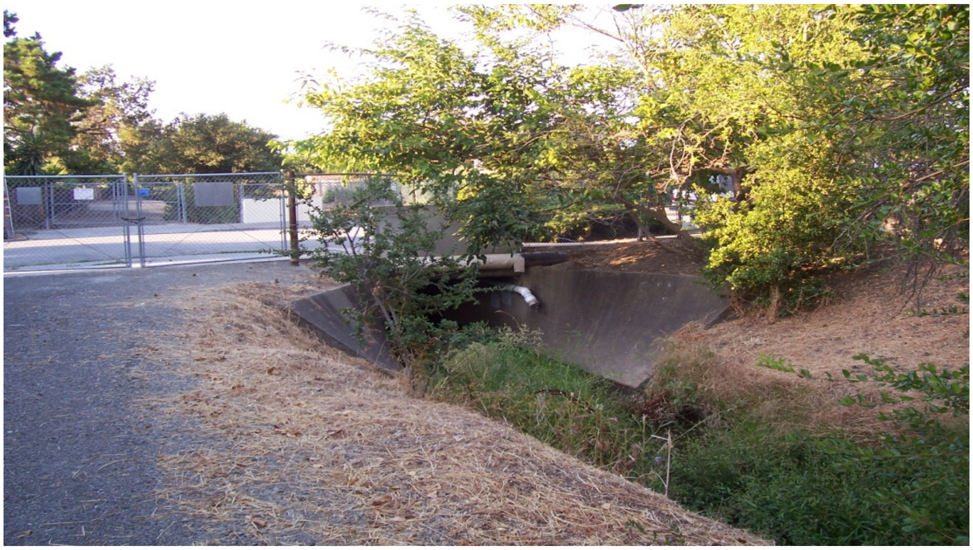


(7) Looking d/s @ 1st weir constriction in channel (STA 3+30)

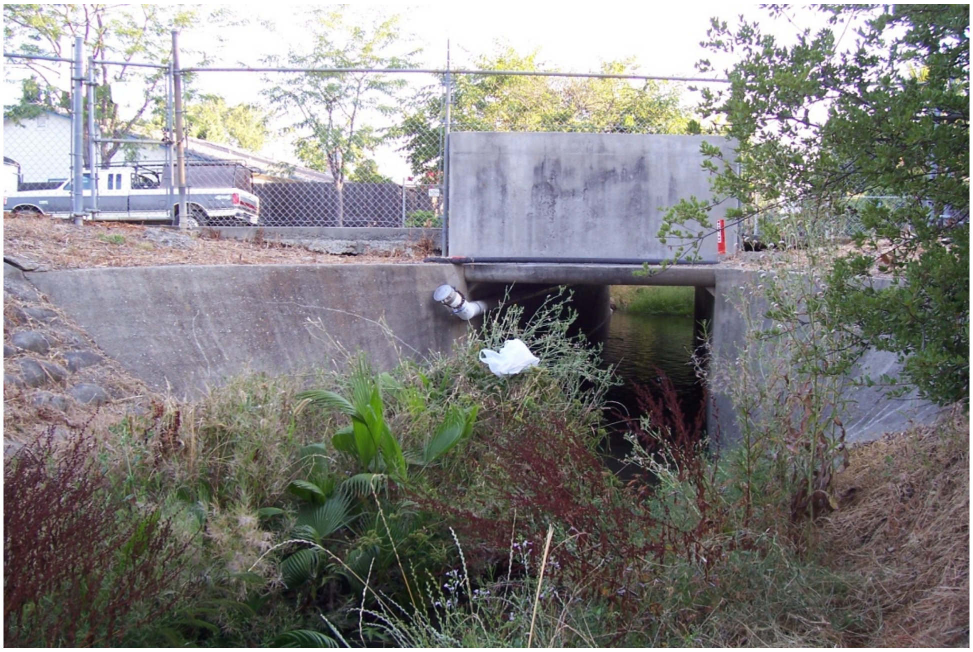
Channel Description:

The reach is characterized by a shallow, trapezoidal channel which drops diagonally 10-12ft into a lagoon area at the confluence with Calabazas Creek. Vegetation is limited to large weeds and grass upstream of the drop structure to the crossing at Danridge Drive.

Rodeo Creek



(8) Looking u/s @ Danridge Dr. culvert (STA 4+27)



(10) Looking d/s @ Danridge Dr. culvert (STA 5+80)

CALABAZAS CREEK
Tributary Supplement - Rodeo Creek Reach #2

Reach 2: From upstream of Danridge Drive Bridge to upstream of Rainbow Drive Bridge (STA 5+53 to STA 13+89)

Reach Description:
The channel is trapezoidal in cross section and straight. There is extensive use of sack concrete to protect the western bank. The eastern bank is predominantly grass covered earth with large rock protection. Both banks are only occasionally vegetated with groupings of brush and large trees which changes to a more connected riparian canopy providing shade further upstream. Bed material consists mostly of gravel and large rocks which have become dislodged from the bank. A wide access road is located on the top of the eastern bank. Two concrete weir structures are located across the channel bottom. This entire reach is located in the City of San Jose.

Reach Average Invert Slope: Invert approximate average slope for this reach is 0.012 (STA 5+52.7 to STA 12+97.5)

1% Flow: 320 cfs

10% Flow: 210 cfs

Current Reach Capacity: This reach has the capacity to convey 1% flow (320 cfs) from upstream of Danridge Drive Bridge to upstream of Rainbow Drive Bridge.

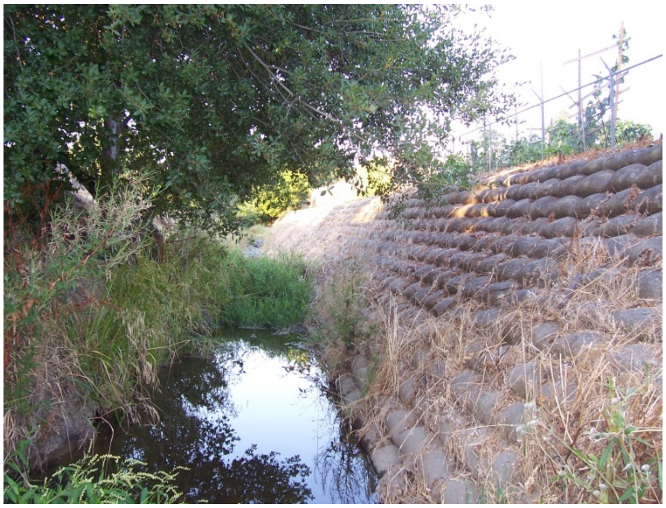
Reach Flooding area Profiles: No flooding issues exist within this reach.

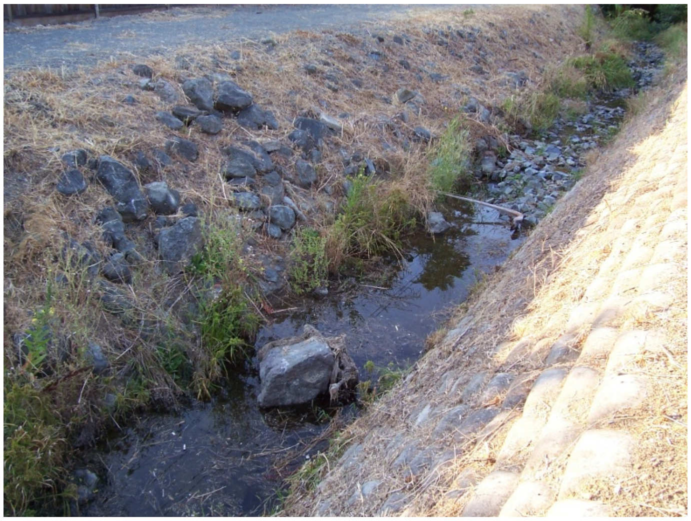
Reach Roughness Coefficient: See roughness coefficient “n” value report for this reach.

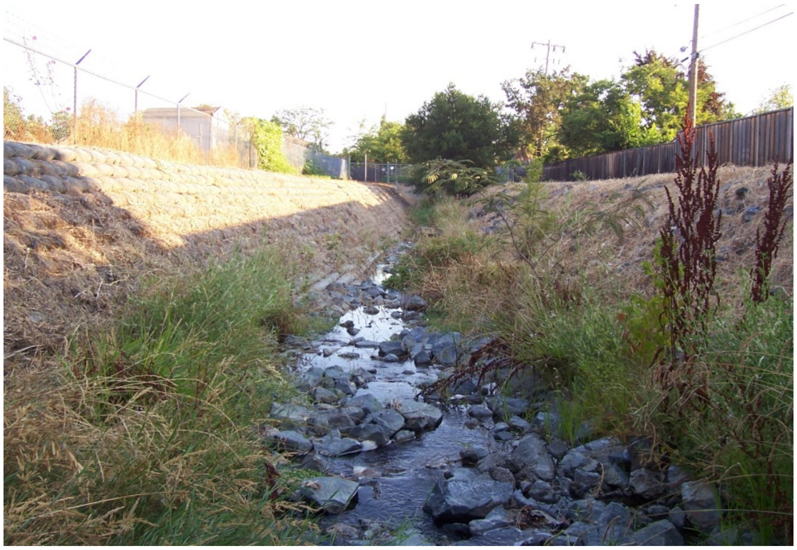
Reach Typical Photos: See the following pages for typical photos and their channel descriptions. Pagination of photos is 2-1 to 2-3. For location and stationing see Figure 1 for all reaches.

Reach Erosion Problem: No significant erosion was noted within this reach.

Rodeo Creek


(12) Looking u/s – sack concrete on west bank (STA 6+06)

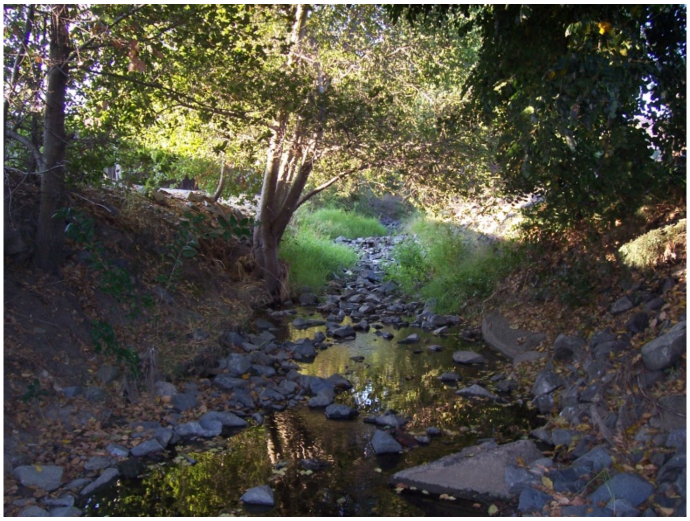

(14) West bank sack concrete, rock east bank (STA 6+61)

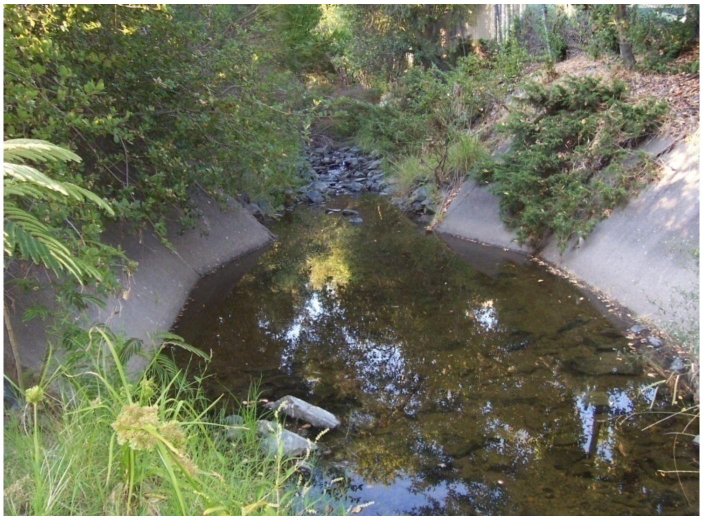

(15) Looking d/s-, sack concrete western bank (STA 7+44)

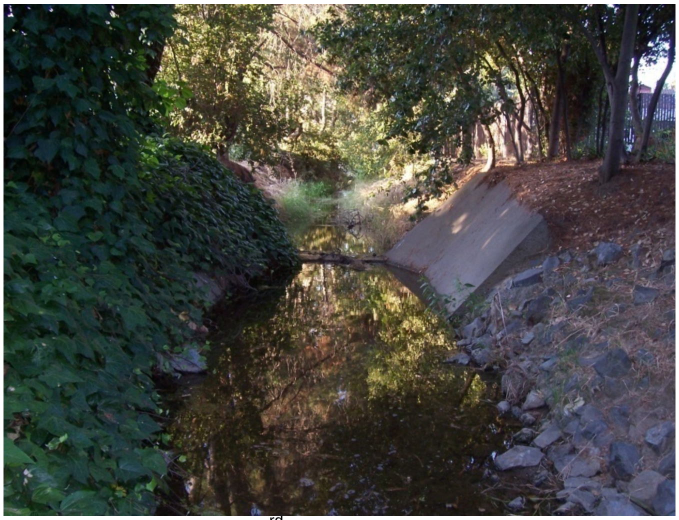
Channel Description:

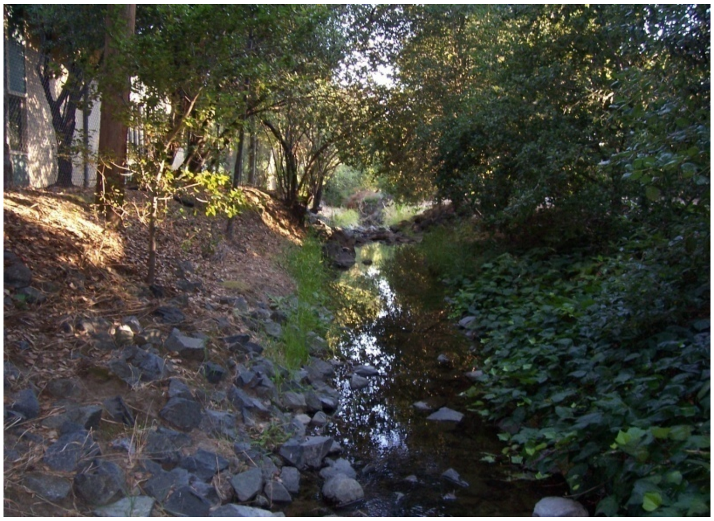
In this section the western bank is completely protected with sack concrete while the opposite bank is earthen with imbedded large rocks. The invert is covered with mostly gravel and large rocks that have fallen from the bank. Vegetation consists of only one tree on the eastern bank, dry grass, and weeds lining the toe of the invert.

Rodeo Creek


(16) Looking u/s- shallow/narrow channel (STA 7+44)


(19) Looking u/s from eastern bank @ 2nd weir (STA 8+86)

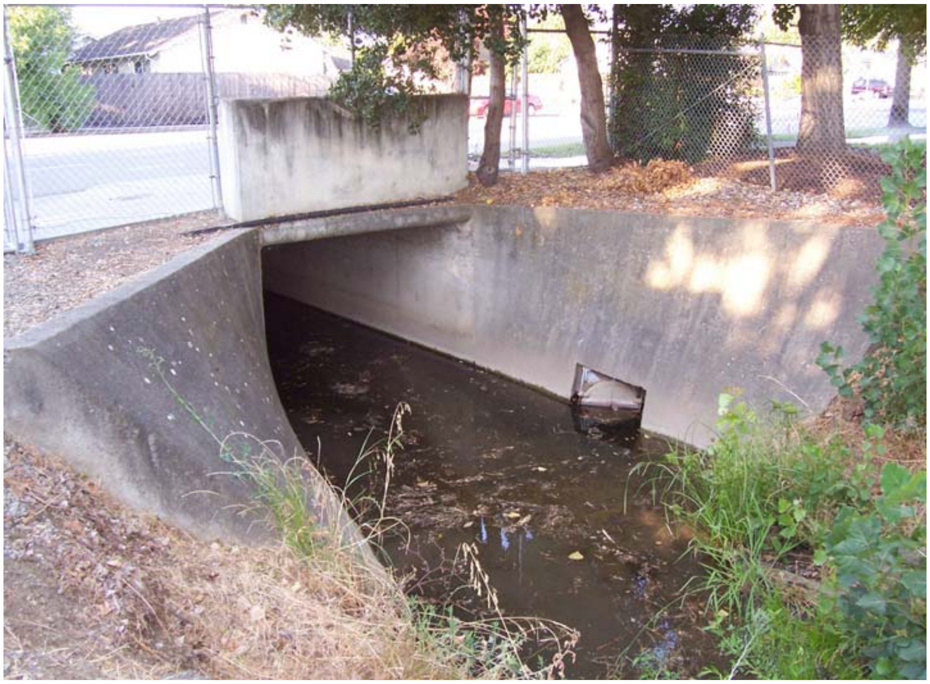

(23) Looking u/s @ 3rd weir in channel (STA 10+73)


(24) Looking d/s-, significant vegetation (STA 10+73)

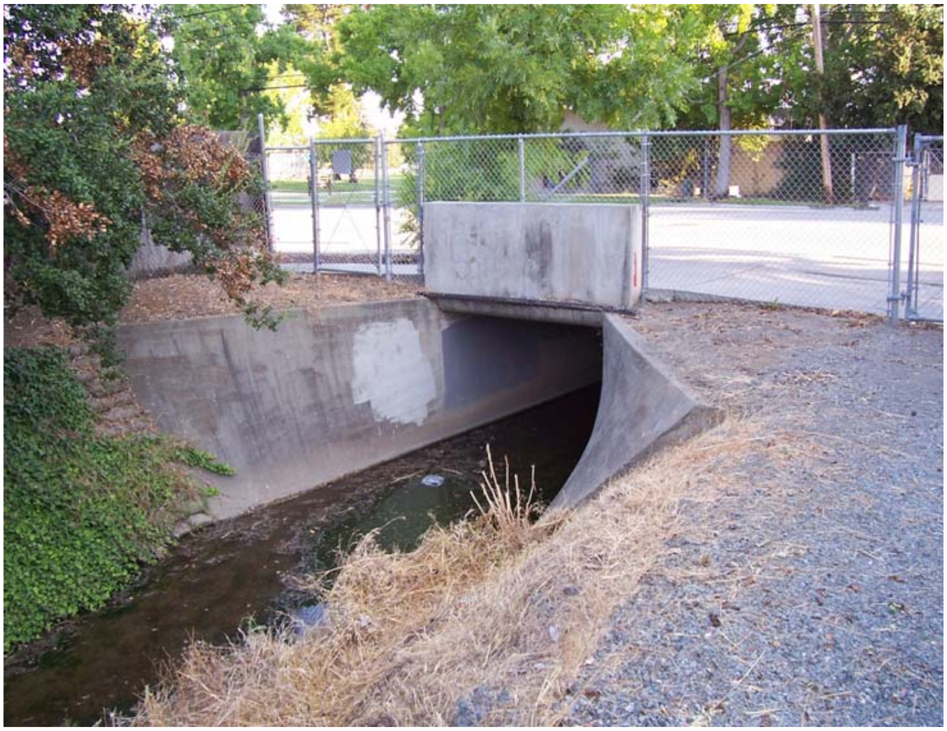
Channel Description:

The riparian canopy as well as bankside vegetation has increased significantly in this section. Both banks are protected with very large rocks which have occasionally fallen to the invert. Two concrete weir constrictions are located in this section.

Rodeo Creek



(27) Looking u/s – d/s of Rainbow Drive



(29) Looking d/s – u/s of Rainbow Drive

CALABAZAS CREEK
Tributary Supplement - Rodeo Creek Reach #3

Reach 3: From upstream of Rainbow Drive Bridge to upstream of Dartmoor Way Bridge (STA 13+89 to STA 29+17)

Reach Description:
The engineered channel shape is very uniform due to the extensive use of gabions and invert protection. Downstream of Rainbow Drive the west bank has a short section of sack concrete protection while the east bank is unprotected soil. Minor maintenance work has to be done at STA 14+28 on west bank and STA 17+26 on the east bank (see appendix C for hydraulic run output for Rodeo Creek). At station 20+00 ivy covered sack concrete begins again on the west bank and continues for 66 feet where rock and wire gabions begin on both sides of the creek and continue for the remaining length of the reach. An access road is located on the eastern bank while the western bank is very close to the fenceline. Most vegetation occurs on the west bank and there are some large trees although many are on the other side of the fence in neighboring backyards. There are weeds along the invert and large growths of ivy that have spread from back fences into the creek. Bed material is mostly sand and small gravel with little to no large rocks. The Dartmoor Way crossing has concrete access ramps on both the upstream and downstream eastern bank which are bounded by large concrete transitions near the fenceline which cut off the access road. This entire reach is located in the City of San Jose.

Reach Average Invert Slope: Invert approximate average slope for this reach is 0.004 (STA 13+89 to STA 28+56)

1% Flow: 320 cfs

10% Flow: 210 cfs

Current Reach Capacity: This reach has the capacity to convey 1% flow (320 cfs) from upstream of Rainbow Drive Bridge to upstream of Dartmoor Way Bridge.

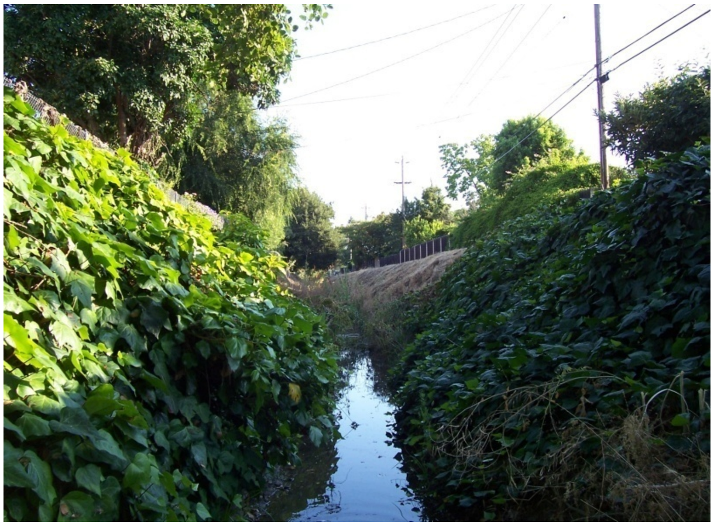
Reach Flooding area Profiles: No flooding issues exist within this reach.

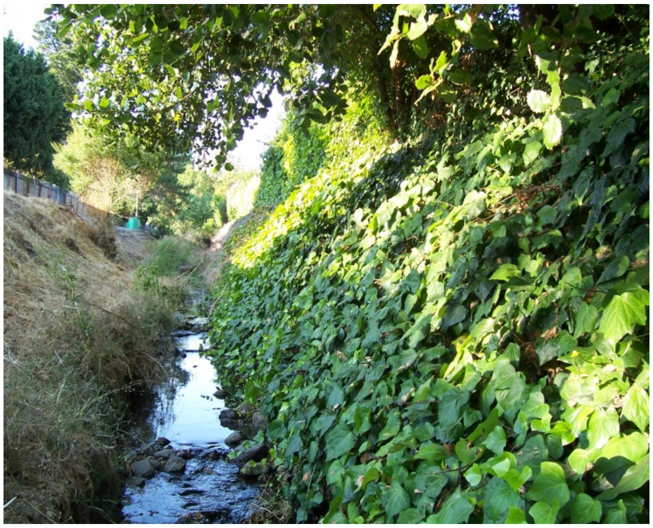
Reach Roughness Coefficient: See roughness coefficient “n” value report for this reach.

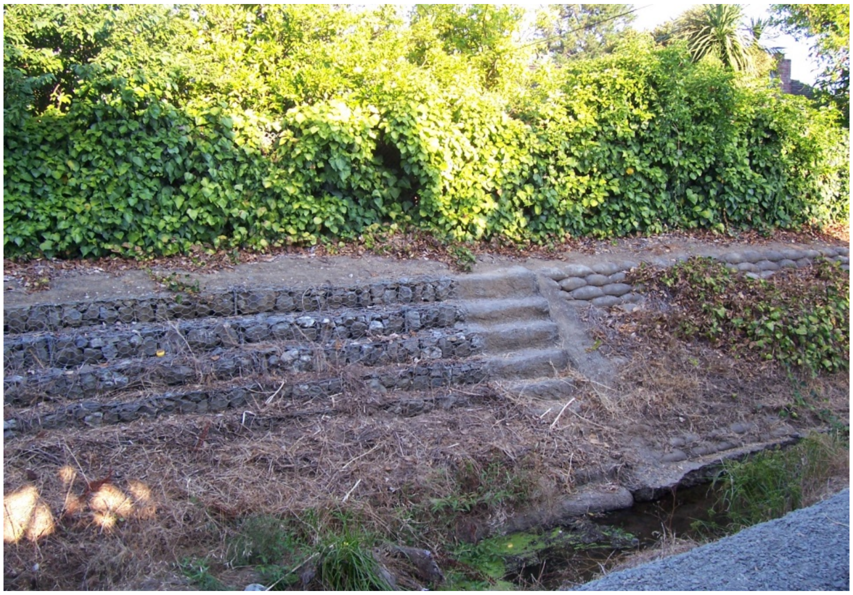
Reach Typical Photos: See the following pages for typical photos and their channel descriptions. Pagination of photos is 3-1 to 3-3. For location and stationing see Figure 1 for all reaches.

Reach Erosion Problem: No significant erosion was noted in this reach.

Rodeo Creek


(33) Looking d/s sack concrete on east bank (STA 19+73)

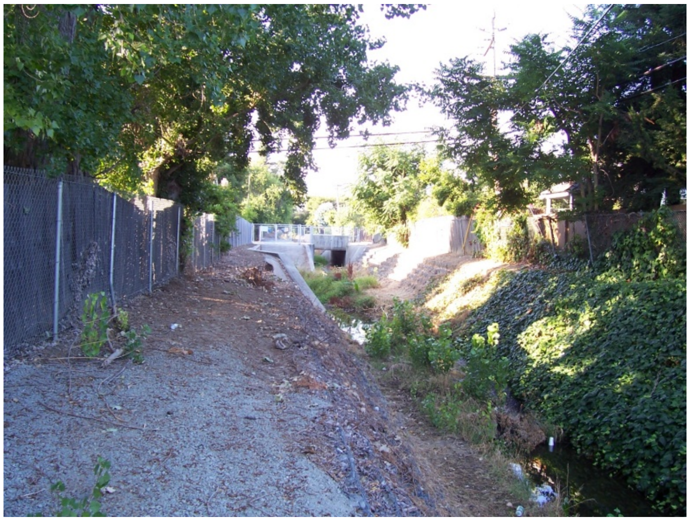

(31) Looking d/s sack concrete on east bank (STA 20+00)


(34) Looking @ point where gabions begin on both sides of creek (STA 20+93)

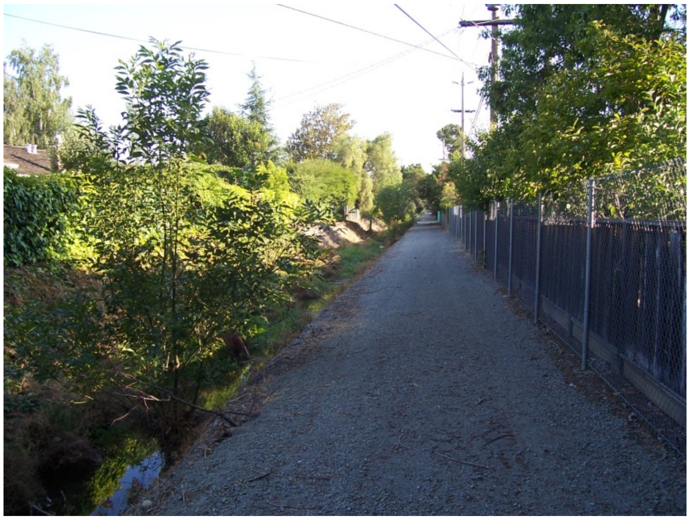
Channel Description:

Just upstream of Rainbow Drive the banks are a combination of unprotected firm soil and sack concrete. There is extensive ivy growth on both sides of the channel, making it difficult to determine the point where sack concrete bank protection starts on western bank. Large trees on the other side of the western fenceline provide occasional limited shade. At station 19+66 gabions begin on both sides of the creek.

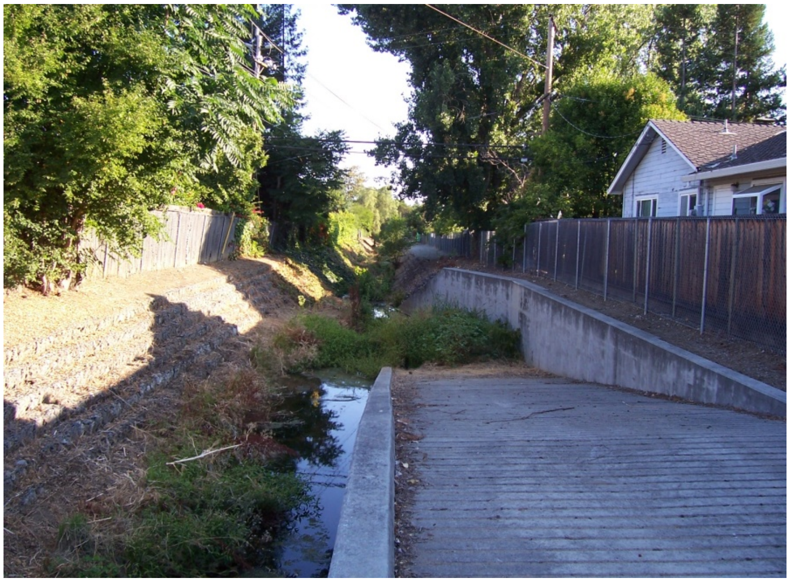
Rodeo Creek



(36) Looking d/s from access road on east bank (STA 26+15)



(35) Looking u/s @ Dartmoor culvert from east bank (STA 26+15)

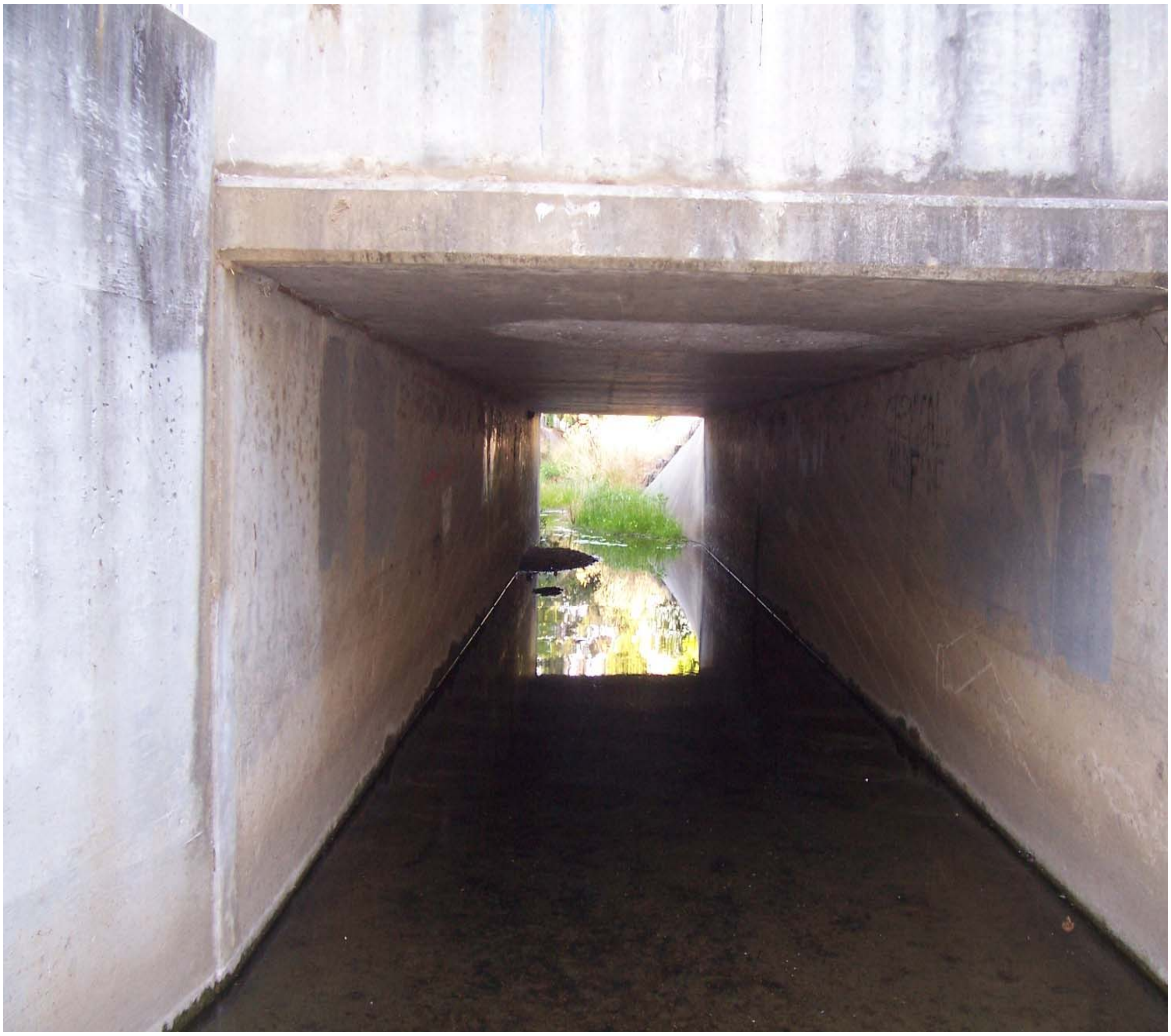


(37) Looking d/s from Dartmoor Way (STA 28+28)

Channel Description:

This is an engineered channel. The alignment is straight, the slope is uniform, and both banks are enclosed with gabions. Vegetation consists of weeds and ivy that have grown on the gabion walls. The fenceline is very close to the top of bank.

Rodeo Creek


(39) Looking u/s – d/s of Dartmoor Culvert

CALABAZAS CREEK
Tributary Supplement - Rodeo Creek Reach #4

Reach 4: From upstream of Dartmoor Way Bridge to upstream of Prospect Road Bridge (STA 29+17 to STA 40+44)

Reach Description:
The gabion bank protection continues for the entire length of this reach. Brick shaped invert protection is used in this reach and may be present in other reaches where the gabions are used, although it was not observed. No access road is available on either bank, however, there is ramp access at both Dartmoor Way and Prospect Road. Ivy and weeds cover some of the gabions, and there are occasional trees along the fenceline which is close to the top of bank. This entire reach is located in the City of San Jose and Saratoga.

Reach Average Invert Slope: Invert approximate average slope for this reach is 0.004 (STA 29+17 to STA 39+22)

1% Flow: 310 cfs

10% Flow: 200 cfs

Current Reach Capacity: This reach has the capacity to convey 1% flow (310 cfs) from upstream of Dartmoor Way Bridge to upstream of the Prospect Road Bridge.

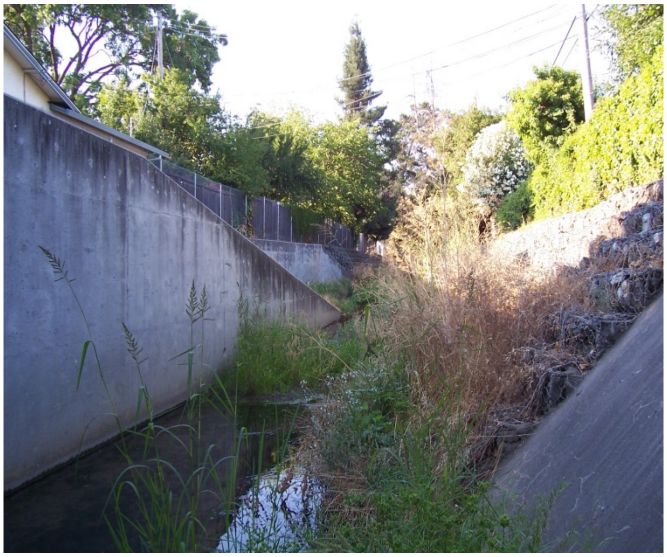
Reach Flooding area Profiles: No flooding issues exist within this reach.

Reach Roughness Coefficient: See roughness coefficient “n” value report for this reach.

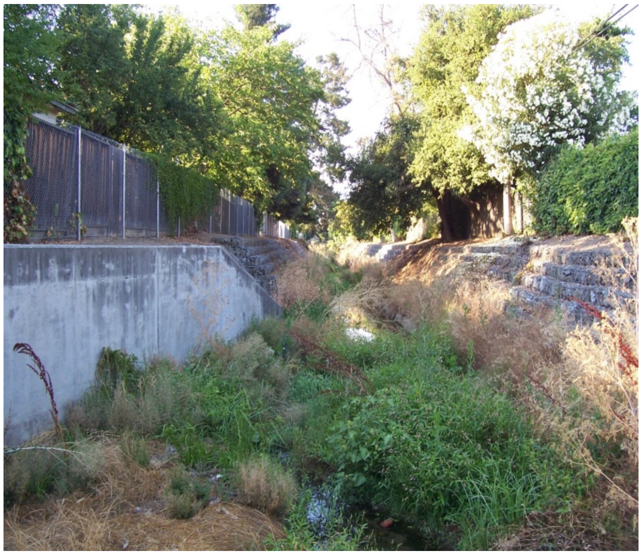
Reach Typical Photos: See the following pages for typical photos and their channel descriptions. Pagination of photos is 4-1 to 4-3. For location and stationing see Figure 1 for all reaches.

Reach Erosion Problem: No significant erosion was noted in this reach.

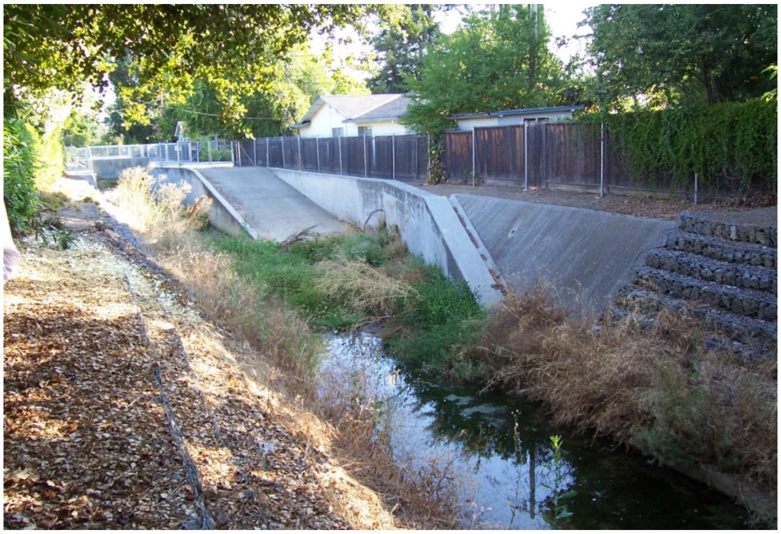
Rodeo Creek



(42) Looking u/s – u/s of Dartmoor Way culvert (STA 29+58)



(43) Gabion to concrete transition u/s of Dartmoor (STA 29+88)

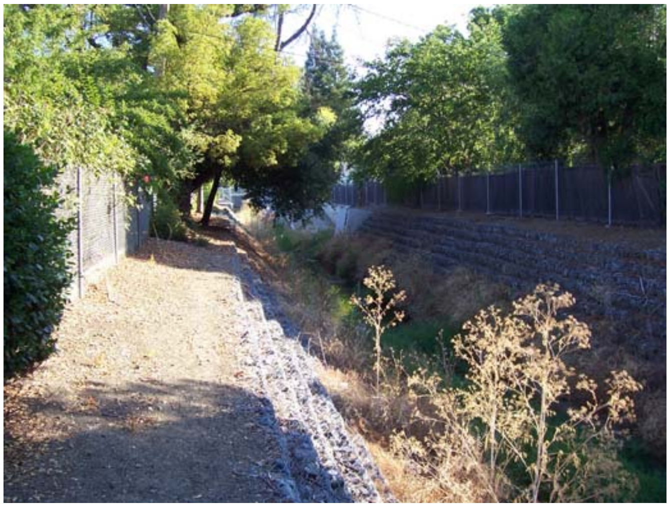


(45) Looking d/s @ Dartmoor Way access ramp (STA 30+73)

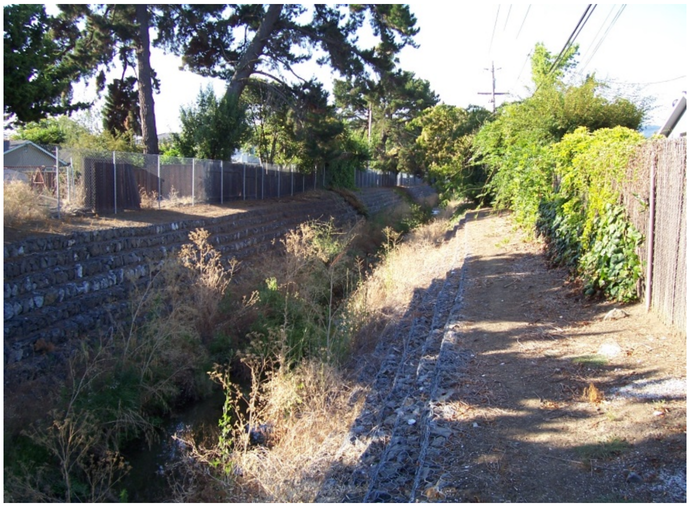
Channel Description:

The fenceline is at the top of the bank gabions with no access road. An access ramp to the creek extends on the west bank from Dartmoor Way. Most vegetation is in or overgrown from neighboring backyards.

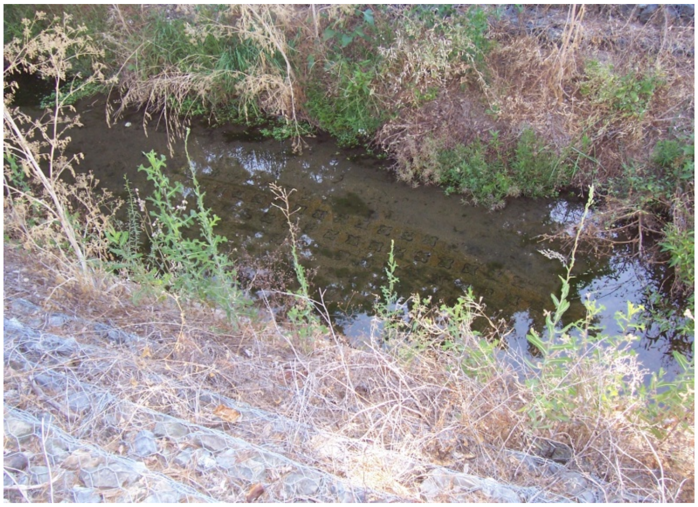
Rodeo Creek



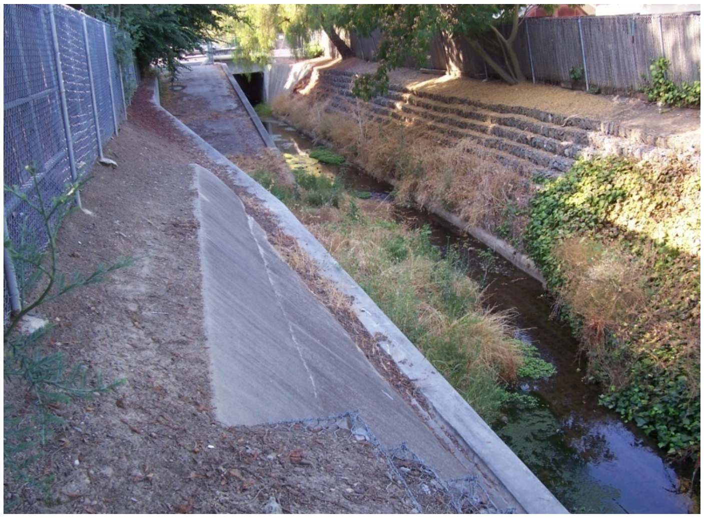
(47) Looking u/s between Dartmoor and Prospect (STA 31+84)



(46) Looking d/s – between Dartmoor & Prospect (STA 31+74)



(48) Invert protection for most of this channel section (STA 32+28)

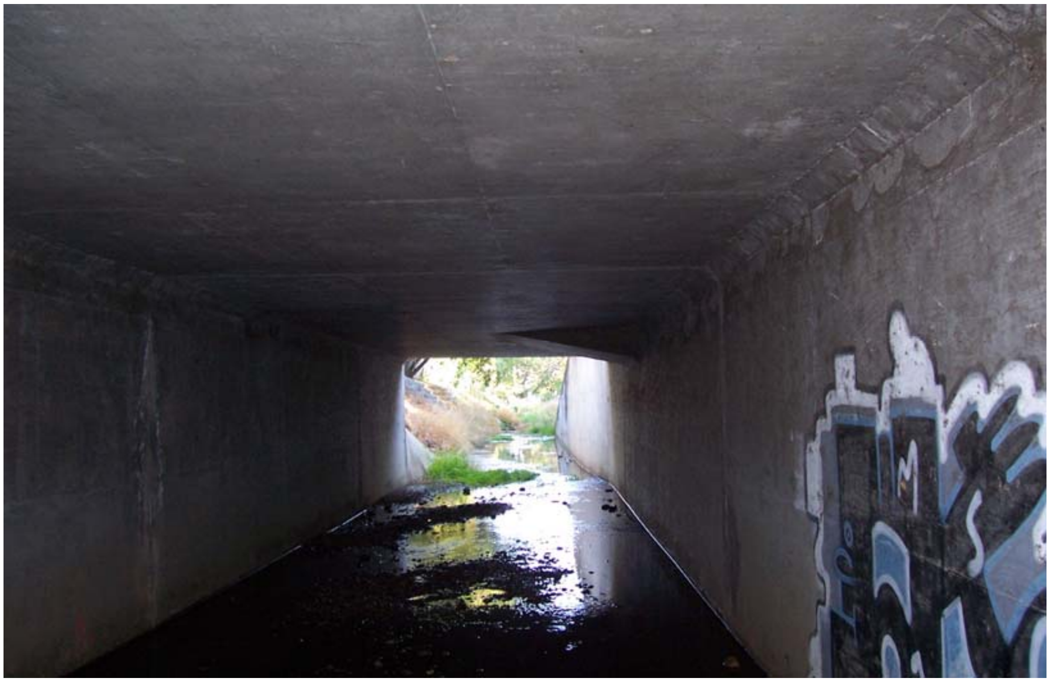


(49) Looking u/s d/s of Prospect Road (STA 37+53)

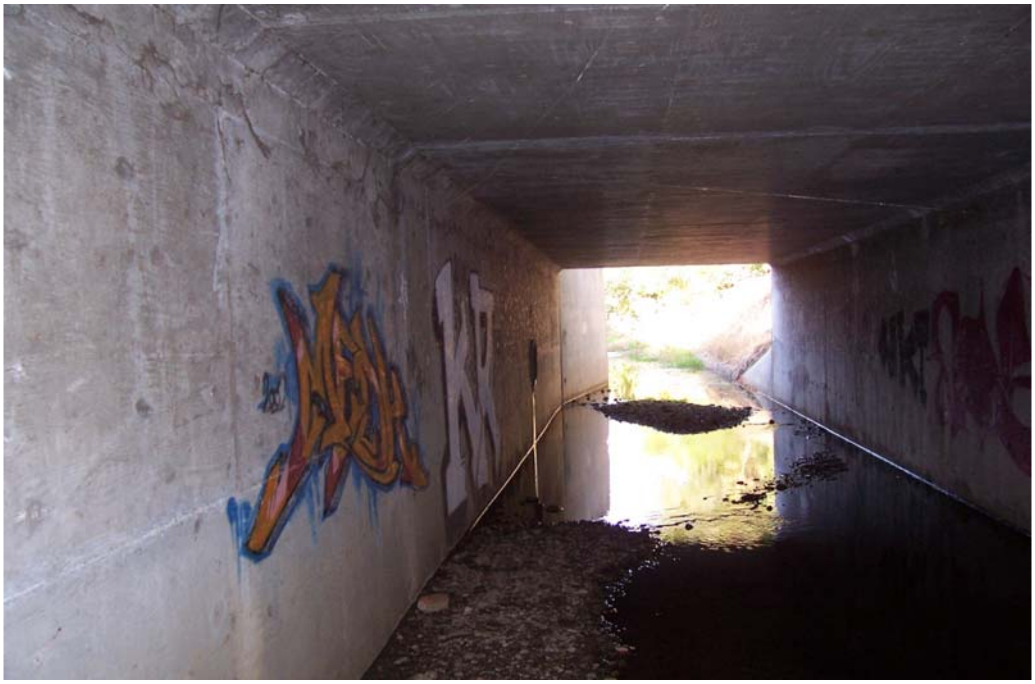
Channel Description:

The channel is straight with gabion protection on both banks and an artificial armoring on the invert. Vegetation is mainly weeds and ivy. Very little bed sedimentation is present, as can be seen in the photo of the exposed invert protection.

Rodeo Creek



(53) Looking d/s – inside Prospect Road Culvert



(54) Looking u/s – inside Prospect Road Culvert

CALABAZAS CREEK
Tributary Supplement - Rodeo Creek Reach #5

Reach 5: From upstream of Prospect Road Bridge to downstream of Hwy 85 tunnel (STA 40+44 to STA 49+14)

Reach Description:
Straight, engineered channel with a bend to the west at the upstream end. There is good access and frequent vegetation. This entire reach is located in the City of Saratoga.

Reach Average Invert Slope: Invert approximate average slope for this reach is 0.004 (STA 40+44 to STA 49+14)

1% Flow: 300 cfs

10% Flow: 200 cfs

Current Reach Capacity: This reach has the capacity to convey 1% flow (300 cfs) from upstream of Prospect Road Bridge to downstream of Hwy 85 tunnel.

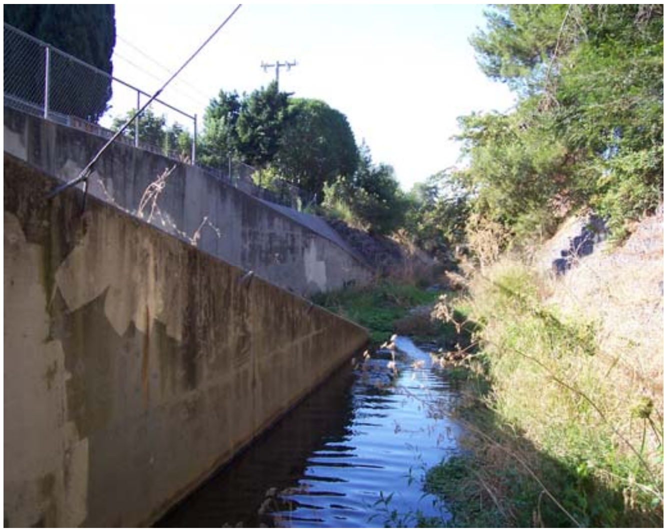
Reach Flooding area Profiles: No flooding issues exist within this reach.

Reach Roughness Coefficient: See roughness coefficient “n” value report for this reach.

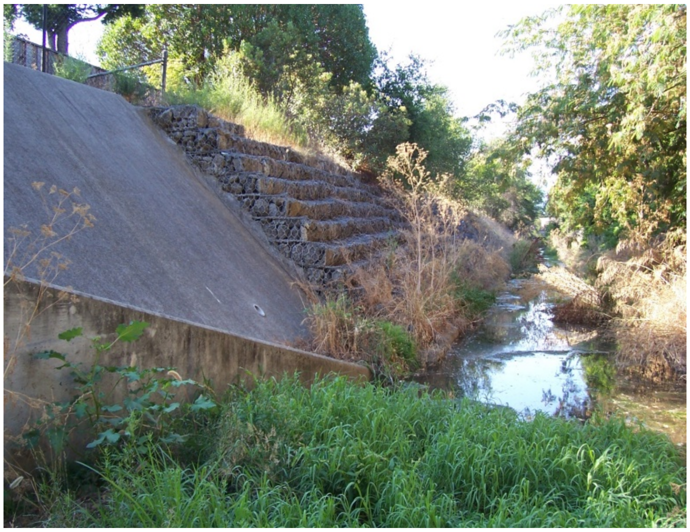
Reach Typical Photos: See the following pages for typical photos and their channel descriptions. Pagination of photos is 5-1. For location and stationing see Figure 1 for all reaches.

Reach Erosion Problem: No significant erosion was noted in this reach.

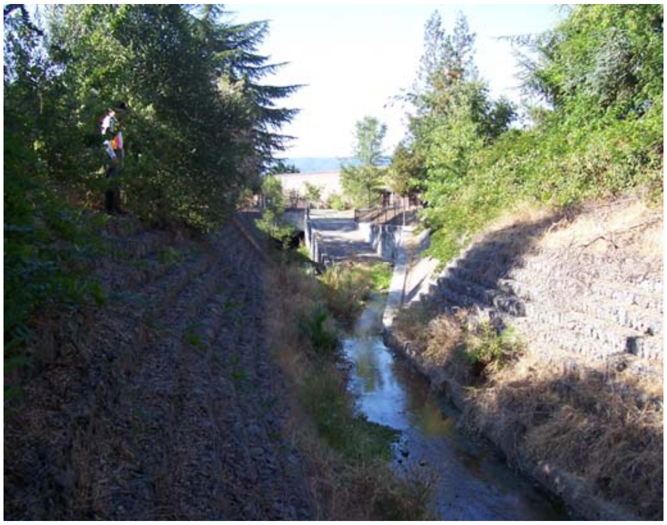
Rodeo Creek



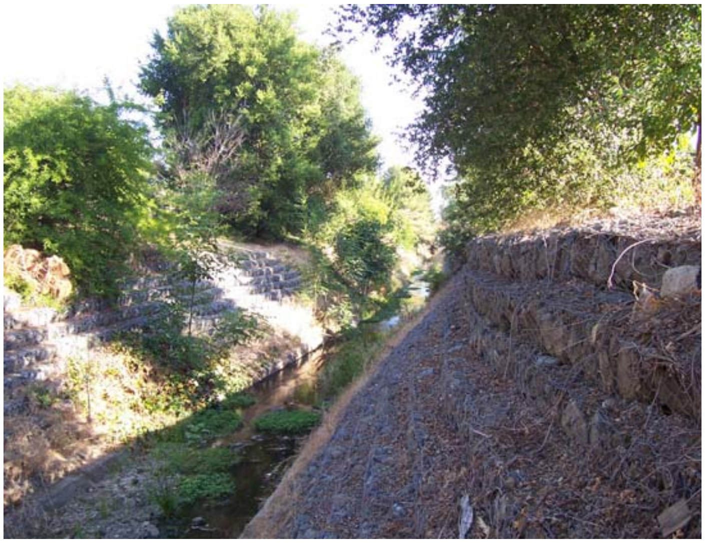
(56) Looking u/s – u/s of Prospect Road (STA 40+92)



(60) Looking u/s – end of Prospect access ramp (STA 41+30)



(65) Looking u/s – d/s of HWY 85 (STA 46+95)



(66) Looking d/s – (STA 46+83)

Channel Description:

Straight, engineered channel with gabions and invert protection. Cables are used to anchor large trees to concrete ramp wingwalls. Service road on top of east bank gives good access. There is some vegetation which has grown over from the residential backyards and taken hold in the creek. Occasional trees are located on the top of the both banks.